REMARKS/ARGUMENTS

Applicants thank Examiner Bleck for the telephonic interview on June 1, 2006, and Examiner's supervisor, Supervisory Examiner Thomas, for the telephonic interview on July 14, 2006. Based on those conversations and on the "Response to Arguments" set forth by the Examiner in the Office Action dated April 4, 2006, Applicants respectfully request reconsideration of the present application.

Rejection under 35 U.S.C. § 102

Claims 1-5, 16, 18-24, 27-32, 36-37, 39-47 and 48-49 were rejected under 35 U.S.C. § 102(e). As previously asserted, Applicants respectfully oppose these rejections, and as discussed in the telephonic interviews, Applicants disagree with the points made in the "Response to Arguments" set forth in the Office Action dated April 4, 2006. As described below, the § 102 rejection is unsupported by the art and should be withdrawn, and Applicants respectfully request reconsideration of this rejection

Claims 1-5, 16, 18-24, 27-32, 36-37, 39-47 and 48-49 were rejected under 35 U.S.C. § 102(e) as being anticipated by Lash (US 2001/0020229 A1). In the Amendment and Response mailed January 17, 2006, Applicants respectfully opposed these rejections and argued that the cited reference fails to teach each and every element of every claim as required by MPEP § 2131. Specifically, Applicants argued, *inter alia*, that the Lash reference failed to teach computing a plurality of scores for each member in a health plan and therefore the reference failed to anticipate independent claims 1, 48 and 49. For Examiner's convenience, Applicants reproduced those arguments in Appendix A herein.

In the "Response to Arguments" set forth in the Office Action dated April 4, 2006, the rejection first argues that Lash teaches "a score is computed that corresponds to each of a plurality of the members in a health plan (par. 7 – stored program computes probability values for each patient...)." P. 16. As an initial matter, Applicants previously demonstrated that Lash first filters out members of a managed care organization prior to performing any analysis on the members. *See* Appendix A. Therefore the reference fails to teach computing a plurality of scores for each member in a health plan as claimed; rather Lash only analyzes a subset of the

members in a managed care organization. Thus, in the passage of Lash cited by Examiner, reference to Paragraph 7, which reads "The stored program computes probability values for each patient...", it is clear that the word "each" indicates that a probability value is computed for each patient in the filtered subset of patients, not for each patient in the managed care organization.

More importantly, the "Response to Arguments" goes on to assert and rely upon the following statement:

> **Nothing in claim 1 says that the scores must be calculated for all members of a health plan.**

P. 17. (emphasis added) As an initial matter, Applicants respectfully disagree because claim 1 recites:

> ...a plurality of utilization scores is computed that correspond to each of a plurality of members in a health plan.

It is unclear how this limitation is being interpreted so as not to require calculating scores for all members of a health plan. Additionally, Applicants indicated that the argument regarding utilization scores also applied to claims 48 and 49, but nowhere does the "Response to Arguments" address these claims. Therefore, Applicants do not know how the Examiner viewed the argument with respect to claims 48 and 49. Claims 48 and 49 both recite:

> ...for each of the plurality of plan members in the healthcare plan...computing a utilization score...

Once again, it is not clear to Applicants how this limitation is being interpreted so as not to require calculating scores for all members of a health plan.

For at least the foregoing reasons, Applicants respectfully re-assert the arguments set forth in Appendix A and request reconsideration of the 35 U.S.C. § 102 rejection in light of these comments.

Rejection under 35 U.S.C. § 103

Claims 6-15, 17, 25-26, 33-34, and 38 were rejected under 35 U.S.C. § 103(a). Each of these claims is allowable as depending from allowable claim 1 for at the reasons provided above.

Additionally, in the telephonic interview on June 1, 2006, with Examiner Bleck, the Examiner indicated that should the foregoing arguments with respect to the § 102 rejection based on Lash be found persuasive, the rejection might be changed to a 35 U.S.C. § 103(a) rejection based on Lash. Applicants respectfully note that in addition to Lash's failure to teach each and every claim limitation, the present claimed invention would also not be obvious over Lash for at least the reasons that Lash teaches away from being modified to achieve the present claimed invention and the function of Lash would be destroyed as a result, as described below:

Lash teaches a calculation of a score indicative of a patient's predictive future cost of medical services based on a predetermined predictive model. More specifically, Lash teaches the use of a predictive behavioral model created exclusively for homogenous patient populations, that is, a behavioral model for patient populations having similar diseases or diagnosed conditions. See page 4, paragraph 37, lines 25-34. The behavioral model in Lash is a formula consisting of weighted coefficients and variables used to predict the future cost of medical services for a single patient. See page 4, paragraph 38. Depending on the specific disease or diagnosed condition of the homogenous patient population, a predetermined selection of these variables and coefficients, consisting of less than the entire set of variables and coefficients, are used in the model. Page 4, paragraph 38, lines 5-15 ("Those variables or combinations of variables that are above a selected minimum ability to predict whether the patient will be a high user of medical services are selected . . . The result is a model . . . in the form of a probability equation which includes the high relevance variables multiplied by their . . . weighting coefficients[.]"). Therefore, before application of the predictive model, and thus before the determination of high-cost patients, the patient populations operated on using the method described in Lash must first be filtered by disease or diagnosed condition in order to determine the appropriate variables and coefficients. Lash explicitly teaches away from applying its behavioral model to any group of patients that is not homogenous because, according to Lash, suitable variables and coefficients are determined based on the factor that makes a group of patients homogenous (e.g., the specific disease or diagnosed condition inflicting the homogenous population). Page 4, paragraph 37, lines 23-32 ("It is very difficult to create accurate models with diverse populations of patients because they have very different motivations that control

their behavior . . . Therefore, if the population is not otherwise homogenous, it is filtered, for example on the basis of the disease or diagnosed condition . . .").

Because Lash teaches away from being modified to achieve the present claimed invention and the function of Lash would be destroyed as a result, the reference fails to teach or suggest computing a plurality of scores for each member in a health plan as claimed.

Rejection under 35 U.S.C. § 101

Claims 1-34, 36, and 39-47 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants re-assert the arguments regarding § 101 from the Amendment and Response mailed January 17, 2006 and incorporate them by reference. Specifically, Applicants maintain that the claim limitations recite a "method in a computer system" and are patentable subject matter recited in § 101.

Even under the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility ("Interim Guidelines"), under which Examiner asserts the appropriate question is "whether the claimed invention produces a practical application that produces a useful, tangible, and concrete result," Applicants' claimed invention still satisfies the subject matter eligibility requirement of 35 U.S.C. § 101. Specifically, Examiner asserts that "claim 1 does not appear...to provide a 'real world' value or result." Applicants note that claim 1 computes a "utilization score." This score is a "real world" value and result as defined by the Interim Guidelines.

The utilization score may be applied and subsequently utilized in various manners. That such applications have not be explicitly recited in claim 1 does not mitigate the fact that the utilization score is a useful (see Interim Guidelines, p. 20, "the utility of an invention has to be (i) specific, (ii), substantial and (iii) credible."), tangible (see Interim Guidelines, p. 21, "The tangible requirement does not necessarily mean that the claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing...the process claim must set forth a practical application...to produce a real-world result"), and concrete (see Interim Guidelines, p. 22, "the process must have a result that can be substantially repeatable or the process must substantially produce the same result again"—

Applicants note that Examiner has not established a *prima facie* case that the claimed invention is not repeatable or reproducible) result.

Finally, Examiner argues that "The claim does not recite any steps beyond computing a score." Office Action dated April 4, 2006, p. 3. However, in State Street Bank & Trust Co. v. Signature Financial Group Inc., the Federal Circuit found that a patent with claims directed towards transforming data (U.S. Pat. No. 5,193,056) was not unpatentable, and the Court noted:

> ...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result"--a final share price momentarily fixed for recording and reporting purposes...

149 F. 3d 1368, 1373, 47 USPQ2d 1596 (Fed. Cir. 1998) (where the sole independent claim of the patent at issue recited various steps of processing data but did not "recite any steps beyond computing..."). The Interim Guidelines notwithstanding, there is inadequate jurisdiction for the guidelines or any interpretation of the guidelines to render a decision inconsistent with current Federal Circuit case law.

This application now stands in allowable form and reconsideration and allowance are respectfully requested.

Respectfully submitted,

DORSEY & WHITNEY LLP
Customer Number 25763

Date: July 27, 2006

By: _____
Christopher R. Hilberg, Reg. No. 48,740
(612) 492-6694

APPENDIX A

Rejection under 35 U.S.C. § 102

Claims 1-5, 16, 18-24, 27-32, 36-37, 39-47 and 48-49 were rejected under 35 U.S.C. § 102(e) as being anticipated by Lash (US 2001/0020229 A1). Applicants respectfully oppose these rejections. The cited reference fails to teach each and every element of every claim as required by MPEP § 2131. For at least this reason, the § 102 rejection is unsupported by the art and should be withdrawn.

Claim 1 recites, "a plurality of utilization scores is computed that correspond to each of a plurality of members in a health plan." Lash fails to teach computing a plurality of scores for each member in a health plan; rather the references describes giving scores to only a subset of health plan members. See page 4, paragraph 39 ("...[A]ll of the patients in a particular sub-population have their records scored..."). In particular, Lash gives scores to members of a homogenous group with a common disease, not to each member of a health plan as claimed.

Specifically, Lash discloses a method for predicting the likelihood that a patient diagnosed with a specific disease or medical condition will become a high user of medical services. In practice, prior to performing any analysis on the member patients in a managed care organization, the method of Lash first filters the patient members into a "homogenous sub-population" by disease or diagnosed condition, such as asthma patients or diabetic patients. Page 4, paragraph 37, lines 25-34 ("if the population is not otherwise homogeneous, it is filtered, for example on the basis of the disease or diagnosed condition of the patient to filter the population into more homogeneous sub-populations . . ."); see also, page 5, paragraph 46, lines 12-15, paragraph 48, lines 8-10; see also, Fig. 3, element 65, Fig. 3A, element 65A and Fig. 3B, element 65B. Only after patient members are filtered based on disease or condition does Lash provide scores to the subset of the members of the health plan in an effort to identify future high users of medical services from the homogenized set of patients. See page 4, paragraph 39 ("...[A]ll of the patients in a particular sub-population have their records scored in step 67, i.e., they are given a score based on the individual values for their predictive variables. The higher the score, the more likely they are to be high-use patients."); see also page 4, paragraph 38 ("Once a

homogeneous population or sub-population of patients is identified, then the regression analysis program operates . . . to predict whether the patient will be a high user of medical service . . .").

Because the method of Lash first filters the patient members into a "homogenous sub-population" by disease or diagnosed condition prior to performing any analysis on the member patients in a managed care organization, the reference fails to teach computing scores for each member of a health plan as claimed. For at least the foregoing reasons, claims 1-5, 16, 18-24, 27-32, 36-37, and 39-47 are not anticipated by Lash. Independent claims 48 and 49 are not anticipated by Lash for substantially the same reasons. Reconsideration and allowance of these claims are respectfully requested.